#### Known Problems with WHFS:

# **HYDROBASE**

- 1. Hydrobase will sometimes crash when assigning counties to a river gage using the County/UGC dialog. It most often occurs when assigning many counties (~20) to a single point.
- 2. Once a value is entered for a flood category (minor/moderate/major), the other categories are assigned a value of 0.0, even if the user wants these other categories to be undefined. You cannot "erase" the 0.0 value using the Hydrobase interface. This has ramifications in Riverpro, where a flood warning will be recommended for a point because the observed/forecast stages are greater than the minor/moderate/major categorical value of 0.0. Currently, there are two options to work around the problem: 1) set the categories to extremely high values, or 2) use dbaccess to set the categories to a NULL value. The Hydrobase interface will be fixed in 4.3.
- 3. When generating B-44A reports from the Hydrobase Text Report function, latitude/longitudes for non-river points are being reported as 00 00 00 (degrees/minutes/seconds), even when there are valid latitude/longitudes in the location definition. The text report function appears to be looking for the latitude/longitude values in the river gage table, which is appropriate for E-19 reports, but not B-44 reports. This will be corrected in 4.3.
- 4. When attempting to delete radars from the database using Hydrobase (Setup menu/Radar Locations), you may get an Informix error (error 692). This is because there are other tables in the database that have information in them for this particular radar. The delete function in invokes a procedure in the database that is supposed to account for all these "child" tables. This stored procedure needs to be updated. This will be corrected in 4.3.
- 5. The password protection dialog can be "worked around." This is fixed in 4.3
- 6. The user cannot specify negative numbers in the Low Water dialog. The database will support negative numbers; however, the GUI will not allow them to be input. This has been fixed in 4.3.
- 7. The Station Class Text Report erroneously outputs Observer (Y/N) information in the DCP (Y/N) column. This has been fixed in 4.3.
- 8. The E-19A Text Report often includes garbled text right before the phrase Hydrologist at the bottom of the report. This garbled text is not printed out.
- 9. The E-19A Text Report will move the last line, which includes the Hydrologist's name, the revision date, and the print date to the top of a second page if there are more than about 2 lines of remarks.

### DAM CATALOG

- 1. Some of the displays in the Dam Break Information window have incorrect units, e.g. minutes instead of hours. This is fixed in 4.3.
- 2. When viewing Dam Break data in the Dam Catalog, if a dam is selected for which there are no Dam Break forecasts, the GUI will incorrectly display the forecast values associated with the previous dam selected. The GUI properly states 'Viewing Forecast 0 of 0"; however, instead of displaying no data, it displays the Dam Break data associated with the previous dam selected.

# **HYDROVIEW**

- 1. A new feature in Hydroview with AWIPS Build 4.1 is the river summary. This can be found under the live data menu option. Unfortunately, this feature does not appear to be working at some of the early sites that have been installed with 4.1. This problem is under investigation.
- 2. One of the call-to-action statements in the cta.tpl template file has an incorrect spelling. This is the CARDRIVE section in the cta.tpl template, where it reminds motorists not to drive through water. The word through is spelled incorrectly; there is an extra u, such that the word is spelled in the template through. This can be corrected by modifying the cta.tpl file, using an editor such as vi or dtpad.

The cta.tpl file is in the /awips/hydroapps/whfs/local/data/app/riverpro directory. While the file is owned by the user oper, I believe the permissions have been set such that everyone has read/write/execute permission. If this is the case, then you can be oper, or awipsusr, or whomever, and edit the file. If not, you'll need to become oper to edit the file. Using the editor, you should be able to correct the incorrect spelling.

3. The coloring of the triangles and the display of data on the main Hydroview window for height data is controlled by a table in the database called curheight. Curheight is supposed to contain the most recent observed value and the most recent maximum forecast value for each point. In the current implementation, curheight will accept any physical element that begins with an "H". This has resulted in several instances where old observed data with pe's other than HG (e.g. HP, HT, HI, and HO) have "hung around" in curheight, causing the triangle to become gray, and the display to show missing even though there has been current HG data available. A workaround has been established in 4.2. You will need to create a file in the 'awips/hydroapps/whfs/local/data/app/hydroview directory. The file should be named lid\_pe.dat The contents of the file should be as follows:

HB5ID PE - where HB5ID is the location id, and PE is the shef physical element which you want displayed for that particular location. The lid\_pe.dat file should be filled in on an exception basis; that is, you only need to make entries for locations where there have been problems with the correct PE being displayed. The syntax is one location per line, and it should be in all capital letters.

- 4. If a location receives observed data for more than one H physical element (e.g. HP and HT), the Station Profile display in Hydroview will have an entry for that location for each H physical element that has been ingested.
- 5. When deleting precipitation data from the Station Observations tabular listing, the data is not subsequently deleted from the curprecip table in the database. Riverpro reads from the curprecip table when generating its precipitation accumulations. This can result in Riverpro generating erroneous precipitation accumulation values. This has been fixed in 4.3.
- 6. SHEF files which have been created by the metar2shef translator cannot be viewed via the Hydroview Product Viewer. This has been corrected for 4.3.
- 7. Locations that have defined a zero datum of 0.0 will not display in the Station Profile display. Stations with positive or negative zero datums do display.

### <u>RIVERPRO</u>

- 1. When using a specific format definition (e.g. F3.0) which defines more spaces than there are numbers in the value, the formatter pads the extra space(s) with a 0, instead of a blank. As a result, a temperature value of 78 would be formatted as 078. This will be fixed in 4.3.
- 2. The entire prologue section is repeated for each NWR transmitter when the product is created, instead of just the appropriate information for each specific tower.
- 3. When using an integer format (e.g.I3), and data for the value is missing, the formatter will not use the specified string for missing data—it outputs blank spaces. This is fixed in 4.3.
- 4. Riverpro cannot send NWR products to towers that are controlled by neighboring WFOs. This has been corrected in 4.3.
- 5. Riverpro will occasionally crash when the user is editing in the Crest Comparison dialog. This has been fixed in 4.3.
- 6. The Convert to Upper Case option does not recognize lower case text in LITERAL lines in the tabular templates; nor does it recognize lower case text which is inside quotation marks in the FORMAT record lines. This has been corrected in 4.3.
- 7. When a NWR product is generated, incorrect error messages incorrect error messages will occasionally appear in the error and message logs about points being under towers which are controlled by neighboring WFOs, even though the point is clearly defined for a tower which is under the home WFO's control. The formatting of the product is not effected, and the product will still be sent to the correct transmitter at the home WFO. These error messages have been corrected in 4.3.

- 8. Trace precipitation amounts which have been reported as such in the SHEF message are stored in the database with a value of 0.001. Riverpro will output that value if the corresponding FORMAT definition allows for 3 spaces to the right of the decimal point. However, it will not output a T.
- 9. Under the Settings menu/Save to Settings File option, there is a check box at the bottom of the dialog labeled "Save Instructions for Including Specific Forecast Points." Currently, you cannot save a product and include no forecast points (e.g. an STP or RTP product). The instruction is ignored. This is fixed in 4.3.
- 10. In the tabular template, if you've specified a rather large window around the reference time for PP data, and you are using the ACC flag, you can get some unexpected behavior. The algorithm will grab data outside the desired time frame for inclusion in the precipitation accumulation calculation. This problem has been rectified with Build 4.3.
- 11. The "Filter Out-of-Range" option does not work with the varlist setup in the tabular template where the Physical Element, Duration, Type/Source, and Extremum are explicitly defined. The formatter simply finds data that matches the PEDTSE specified, for the time specified, and does not check to see if the data is out of range. The Filter Out-of-Range option does work when using the predefined variables such as <ObsStg>. Release 4.3 has been modified so that the out-of-range option will work in the former case as well.
- 12. Currently, there is a limitation to the number of phrasestr that can be used in one template. That limit is 40.
- 13. The tabular FORMATS record has a limitation of 35 characters for objects within quotation marks. If a phrase within quotes is greater than 35 characters, the entire FORMATS line will be ignored. This limitation is being increased to 45 characters in Build 4.3.

# SYSTEM FUNCTIONS

- 1. There are several issues with the metar2shef translator. Briefly, when the translator encounters carriage return (<CR>) and/or linefeed (<LF>) control characters, the translator may not convert the data group to which the <CR><LF> characters are appended. To correct this problem, one must add an argument to the /awips/hydroapps/whfs/standard/bin/run\_metar2shef script, which calls the metar2shef translator. The instructions for how to do this are under the "How To..." section of the web page.
- 2. When translating hourly temperature data from metar to shef, the translator is using the rounded, whole temperature value instead of the temperature recorded to tenths of a degree C, as reported in the T group of the MTR.